

In the Claims:

Please amend the claims as follows:

1. (currently amended) A method for fiberizing particularly paper and/or paperboard based material, for feeding fiberized material, such as pulp wool, wood fiber or the like, subsequently to a further process, such as its application site, intermediate storage, shipping and/or the like, the fiberization being performed by means of a pulper (1), which is provided with a primary space (A) for processing the material to be fiberized with a knife assembly (1a) included therein and rotating around a rotation axis (s), wherein by the action of its rotation (w) the material to be processed is preprocessed for fiberization by means of a primary knife unit, belonging to the knife assembly, whereafter it is being fiberized by means of a secondary knife unit, belonging to the knife assembly, and by leading it subsequently through a screen assembly (1b) associated with, such as surrounding the knife assembly (1), into a secondary space (B) present in the pulper (1), for supplying the fiberized material further through an expulsion opening (UA) of the pulper (1) to further processing, ~~characterized in that~~ wherein the material to be fiberized is preprocessed by means of a primary knife unit (1a'), which has at least two members and/or is placed in a supply opening (x12) in a way that it is able to preprocess essentially all of the material to be fed into the pulper (1), whereafter the material is being finally fiberized by forcing it to pass between vanes (1a''1), included in the secondary knife unit (1a'') and disposed in overlying positions divergent relative to each other, the thickness of the vanes being between 5 - 20 mm.

2. (currently amended) A ~~The method as set forth in claim 1, characterized in that~~ according to claim 1, wherein the material to be fiberized is preprocessed by a primary knife unit (1a') which has at least two members, whereby first knife members (1a'1) included in the primary knife unit (1a') are disposed in a plane substantially coincident with the vanes (1a''1) of the secondary knife unit (1a'') for rotation together therewith, and second knife members (1a'2) are adapted to be integral with the first knife members (1a'1) and to protrude therefrom in a direction essentially away from the knife assembly (1a).

3. (currently amended) A ~~The method as set forth in~~ according to claim 1 or 2, wherein the fiberization is performed essentially as a dry process, ~~characterized in that wherein~~ the material to be fed into the pulper (1) and/or to be fiberized therein is supplied with one or several additives (XY), such as boric acid, borax and/or the like, particularly for enhancing the thermal/fire resistance properties, decay resistance properties and/or the like of a resulting product, such as pulp wool, wood fiber or the like to be used as thermal insulation.

4. (currently amended) A ~~The method as set forth in any of the preceding claims 1-3, characterized in that~~ according to claim 1, wherein the material to be fiberized and/or the additive (XY) is fed to the fiberization process from a supply assembly (x1) in connection with the pulper (1), such as from one or several supply pockets (x11), supply openings (x12) and/or the like, in response to an underpressure provided essentially by the rotary motion (w) of the knife assembly (1a).

5. (currently amended) An apparatus for fiberizing particularly paper and/or paperboard

based material, for feeding fiberized material, such as pulp wool, wood fiber or the like, subsequently to a further process, such as its application site, intermediate storage, shipping and/or the like, said apparatus comprising a pulper (1), which is provided with a primary space (A) and a knife assembly (1a) included therein and rotating around a rotation axis (s), which comprises a primary knife unit for preprocessing of the material to be fed into the pulper (1) for fiberization and a secondary knife unit, by which the material to be processed is fiberized by forcing it by the action of the knife assembly's (1a) rotation (w) through a screen assembly (1b) associated with, such as surrounding the knife assembly, into a secondary space (B) present in the pulper (1), for supplying the fiberized material further through an expulsion opening (UA) of the pulper (1) to further processing, ~~characterized in that~~ wherein a primary knife unit (1a') included in the knife assembly (1a) is adapted to consist of at least two members and/or to be placed in a supply opening (x12) in a way that it is able to preprocess essentially all of the material to be fed into the pulper (1), and that a secondary knife unit (1a'') consists of vanes (1a''1), disposed in overlying positions divergent relative to each other and the thickness of which being between 5 - 20 mm.

6. (currently amended) ~~An~~ The apparatus as set forth in claim 5, ~~characterized in that~~ according to claim 5, wherein first knife members (1a'1) of the primary knife unit (1a'), consisting of at least two members, are disposed in a plane substantially coincident with the vanes (1a''1) of the secondary knife unit for rotation together therewith, and second knife members (1a'2) are adapted to be integral with the first knife members (1a'1) and to protrude therefrom in a direction essentially away from the knife assembly (1a).

7. (currently amended) ~~An~~ The apparatus as ~~set forth in claim 5 or 6, characterized in that~~ according to claim 5, wherein the second knife members (1a'2) of the primary knife unit (1a') are adapted to be perpendicular to the first knife members (1a'1).

8. (currently amended) ~~An~~ The apparatus as ~~set forth in any of the preceding claims 5-7, characterized in that~~ according to claim 5, wherein the pulper (1) has in connection therewith a supply assembly (X1) for supplying the pulper (1) with a material to be fiberized and/or with one or several additives (XY), such as boric acid, borax and/or the like, particularly for enhancing the thermal/fire resistance properties, decay resistance properties and/or the like of a resulting product, such as pulp wool, wood fiber or the like to be used as thermal insulation, from one or several supply pockets (x11), supply openings (x12) and/or the like, in response to an underpressure provided essentially by the rotary motion (w) of the knife assembly (1a).

9. (currently amended) ~~An~~ The apparatus as ~~set forth in any of the preceding claims 5-8, characterized in that~~ according to claim 5, wherein at least the primary knife unit's (1a') first knife members and/or second knife members are designed in the form of elongated and radially disposed vanes (1a'1/1a'2), having a thickness of 5-20 mm, most preferably 10 mm.

10. (currently amended) ~~An~~ The apparatus as ~~set forth in any of preceding claims 5-9, characterized in that~~ according to claim 5, wherein the clearance (v) between the secondary knife unit (1a'') and the screen assembly (1b) is within the range of 10-50 mm, most preferably 20 mm, and/or that the screen assembly (1b) has a screen capacity within the range of 30-50%, most preferably 40%.